# bvse market report: plastics, May 2021

## 1 Force Majeure

A completely new situation is developing on plastics markets. Exceptionally high demand is met with extremely short supply. The supply of plastics is extremely short due to plant shut-downs and delays in import and export - force majeure. There are many reasons for the shortages in supply and the plant shut-downs are not the only explanation.

The reasons for the booming demand are catch-up effects and a revitalised economy - spring recovery. Plastics processors are ordering to satisfy the strong demand for products and to fill empty receiving warehouses. And finally, the tight supply situation for plastics means that processors are increasingly trying to buy to ensure that their production can continue.

Plastics processors are in a difficult crisis with serious raw materials bottlenecks and extreme, unprecedented price rises. European plastics processors are finding it increasingly difficult to access material. The prices of polymers are thus rising to ever new record highs.

The situation becomes clear when we follow graphic representation of the price indices for standard plastics (Plastixx ST) and technical plastics (Plastixx TT), which show 10-year highs. In KI – Plastics Information Europe, the Plastixx ST and Plastixx TT indices reliably portray the long-term course of the plastics quotes, see https://www.kiweb.de, Fig. 1. For Plastixx ST, for example, the previous high of approx. 2,580 points from 2015 was clearly surpassed in 2021 with 3,250 points.

Often, the plastics processors' demand can no longer be satisfied - this results in allocation. For example, it has been reported that plastics processors were cutting or even temporarily halting their production due to material shortages. The painstakingly accumulated stocks built up in the crisis have been used up apart from remainders.

And now we have to answer the key question - how long will this emergency situation last? No change to the shortages is anticipated in the months ahead; the situation therefore remains tense.

## 2 Primary markets

### 2.1 The standard plastics market

Quotes: The prices for standard plastics are going through the roof! In April 2021 the average price of 1,936 €/t was an average 230 €/t higher than in the previous month (1,706 €/t), see Table 1. In a year-on-year comparison, it can be seen that the average quotes from April 2021 (1,936 €/t) were 1,020 €/t higher than those of the previous year (916 €/t). www.euwid-recycling.de. Specifically, the average price rises are as follows: LDPE film at 100 €/t, LLDPE film at 175 €/t, HDPE at 240 €/t, PS at 300 €/t, PP at 250 €/t and PVC at 200 €/t.

PET_1: Overall, due to coronavirus, there is still a lower demand for PET than in previous years; sales in restaurants, canteens and kiosks are down. Also, due to the weather, there is much lower demand for bottle PET than would otherwise be expected in the spring. The low demand for PET is countered by small quantities of PET on the supply side due to plant shutdowns in Belgium and Poland.

PET_2: With respect to supply and demand, the PET markets are not in balance - there is a shortage of quantities for processing. And the manufacturers' and processors' warehouses are emptying fast, as a result of which demand for PET is rising further. Packaging PET was quoted at an average price of 1,395 €/t in February 2021, thus 100 €/t higher than in the previous month. The upward price trend will probably continue for a while.

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Table 1: Standard plastics prices according to EUWID over the past five months, listed in €/t.

| Prices in €/t | April 2021 | March 2021 | Feb. 2021 | Jan. 2021 | Dec. 2020 |
|---|---|---|---|---|---|
| LDPE film grade | 1950- 2100 | 1850- 2000 | 1450- 1550 | 1200- 1290 | 1020- 1120 |
| LLDPE film grade | 1950- 2100 | 1800- 1900 | 1440- 1540 | 1190- 1280 | 990- 1090 |
| HDPE injection moulding | 1920- 2050 | 1650- 1800 | 1350- 1430 | 1150- 1200 | 960- 1030 |
| HDPE blow moulding | 1910- 2040 | 1630- 1780 | 1330- 1410 | 1150- 1220 | 960- 1050 |
| PS crystal clear | 2150- 2250 | 1850- 1950 | 1370- 1470 | 1320- 1430 | 1190- 1300 |
| PS high impact | 2250- 2350 | 1950- 2050 | 1450- 1550 | 1390- 1500 | 1240- 1350 |
| PP homopolymer | 1900- 2100 | 1700- 1800 | 1400- 1500 | 1180- 1280 | 1040- 1110 |
| PP copolymer | 1950- 2150 | 1750- 1850 | 1450- 1550 | 1230- 1330 | 1090- 1170 |
| PVC tube grade | 1300- 1400 | 1100- 1200 | 1000- 1090 | 940- 1000 | 890- 960 |
| PVC film/cables | 1400- 1500 | 1200- 1300 | 1020- 1100 | 970- 1030 | 940- 1000 |
| **Average Price** | **1936 ± 302** | **1706 ± 282** | **1373 ± 177** | **1214 ± 156** | **1075 ± 124** |

## 2.2 The technical plastics market

Shortages - price rises - panic: the prices of technical plastics rose again in April 2021. Here, too, the shortages due to plant shutdowns are countered by higher demand. However, material supply for plastics processors is still ensured. The continuing material shortage coupled with strong demand is still driving the prices of technical plastics up. No change to the shortages is anticipated in the months ahead - the situation remains tense.

In April, the technical plastics were quoted in EUWID, see www.euwid-recycling.de, at 3,252 €/t and thus an average 568 €/t higher than in February 2021 (2,684 €/t), see Table 2. The average price in April 2021 (3,252 €/t) was 1,079 €/t higher that of April in the previous year (2,173 €/t). The price changes were caused by an average increase in PMMA of 275 €/t, ABS of 700 €/t, PC of 650 €/t, POM of 300 €/t, PA 6 of 650 €/t and PA 66 of 475 €/t.

Table 2: EUWID quotes for technical prices, which are published every two months, over the last six months; prices in €/t.

| Prices in €/t | April 2021 | Feb. 2021 | Dec. 2020 | October 2020 |
|---|---|---|---|---|
| PMMA crystal clear | 3050 – 3300 | 2800 – 3000 | 2700 – 2900 | 2700 – 2900 |
| ABS natural | 2800 – 3000 | 2150 – 2250 | 1800 – 1900 | 1380 – 1430 |
| ABS w/b | 2900 – 3100 | 2250 – 2350 | 1900 – 2000 | 1450 – 1500 |
| ABS coloured | 3550 – 3750 | 2850 – 3050 | 2500 – 2700 | 2050 – 2070 |
| PC crystal clear | 3450 – 3650 | 2950 – 3150 | 2200 – 2400 | 1900 – 2000 |
| PC GF-reinforced | 3850 – 4050 | 3050 – 3250 | 2300 – 2500 | 2100 – 2200 |
| POM natural | 2150 – 2600 | 1850 – 2050 | 1750 – 1950 | 1750 – 1900 |
| PA 6 natural/black | 2500 – 2600 | 2000 – 2100 | 1850 – 1950 | 1800 – 1900 |
| PA 6 GF-reinforced | 2850 – 2950 | 2050 – 2100 | 1950 – 1950 | 1850 – 1900 |
| PA 66 natural | 3700 – 4000 | 3400 – 3500 | 3050 – 3150 | 2800 – 2900 |
| PA 66 GF-reinforced | 3850 – 4150 | 3400 – 3500 | 3050 – 3150 | 2800 – 2850 |
| **Average Price** | **3252** | **2684** | **2265** | **2108** |

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## 3 Secondary plastics markets in the plasticker price index

The plasticker internet platform, see http://plasticker.de, publishes quotes on an hourly basis. The present market report indicates the final monthly prices. It is only possible to represent the preliminary prices for May 2021; they will not become definitive until early June. The two quotes stated for May 2021 below indicate only an interim situation, see the left-hand column in Table 3 and Table 4.

### 3.1 plasticker: Standard plastics

An average price of 559 €/t is calculated for April 2021. And this average price is 24 €/t higher than that of the previous month (535 €/t), see Table 3. The average price for April 2021 (559 €/t) was 68 €/t higher than that of the previous year (491 €/t). Significant price changes (±40 €/t) are: HDPE regranulates +80 €/t, PP regranulates +110 €/t and PS regranulates +240 €/t. The other prices changes, such as for LDPE bale goods, PP bale goods, PVC-P and PET bale goods, are not of sufficient statistical significance for their contribution to be listed here. The price index shows a subdued demand for plastic.

The preview of the May quotes indicates an average price of 604 €/t, see Table 3. The price index of 12.05.2021, shows subdued demand for plastic to date.

Table 3: Standard plastics price according to plasticker; listed in €/t.

| | **May[6] 21** | **April 21** | **March 21** | **Feb. 21** | **Jan. 21** | **Apr. 20** |
|---|---|---|---|---|---|---|
| HDPE regrind[1] | 630 | 620 | 580 | 520 | 500 | 520 |
| HDPE regranulates[5] | 1060 | 960 | 880 | 800 | 690 | 720 |
| LDPE bale goods[2] | 310* | 260* | 160* | 140 | 150* | 220 |
| LDPE regrind[1] | 520* | 530 | 490 | 470 | 510 | 530 |
| LDPE regranulates[5] | 770 | 680 | 640 | 600 | 570 | 640 |
| PP bale goods[3] | 190* | 270* | 360* | 350* | 270* | 190 |
| PP regrind[1] | 640 | 550 | 530 | 520 | 510 | 510 |
| PP regranulates[5] | 1110 | 960 | 850 | 740 | 720 | 830 |
| PS regrind[4] | 660 | 600 | 570 | 510 | 510 | 610 |
| PS regranulates[5] | 1390 | 1160 | 920 | 880 | 750 | 800 |
| PVC_P regrind[1] | 180* | 240* | 530* | 450* | 510* | 260 |
| PVC_U regrind[1] | 410* | 480* | 520* | 400 | 390 | 440* |
| PET bale goods | 170* | 140* | 80* | 100* | 160* | 220 |
| PET regrind mixed colours | 420 | 380 | 380 | 380 | 380 | 380 |
| **Average Price** | **(604)** | **559** | **535** | **490** | **473** | **491** |

*: Supply figure too low to attain statistical significance; [1]: equivalent to the grade "post-industrial mixed colours"; [2]: equivalent to K49; [3]: equivalent to K59; [4]: equivalent to “standard, mixed colours”; [5]: equivalent to the grade “regranulates, black"; [6]: preview (may be amended by additional quotes)

### 3.2 plasticker: Technical plastics

An average price of 1,439 €/t is calculated for April 2021. And this average price is 74 €/t higher than that of the previous month (1,365 €/t), see Table 4. The average price for April 2021 (1,439 €/t) was 174 €/t higher than that of the previous year (1,265 €/t).

These plastics show price changes of more than ± 70 €/t: ABS regranulates +490 €/t and POM regranulates +110 €/t. The price index shows a satisfactory demand for plastic.

The probable average price in May 2021 (1,506 €/t) is quoted at 67 €/t higher than in the previous month (1,439 €/t). The May price index of 12.05.2021 shows subdued demand for plastic.

Table 4: Technical plastics price according to plasticker; listed in €/t.

| | **May[6] 21** | **April 21** | **March 21** | **Feb. 21** | **Jan. 21** | **Apr. 20** |
|---|---|---|---|---|---|---|
| ABS regrind | 660 | 640 | 580 | 550 | 530 | 630 |
| ABS regranulates[5] | 2120 | 2300 | 1810 | 1480 | 1500 | 1040 |
| PC regrind | 940 | 850 | 840 | 830 | 650 | 820 |
| PC regranulates[5] | 1860 | 2000 | 1970 | 1850 | 1870 | 1940 |
| PBT regrind | 700* | 530* | 470 | 450 | 470 | 450 |
| PBT regranulates | 1940 | 1930 | 1920 | 1810 | 1710 | 1880 |
| PA 6 regrind | 1000* | 870 | 870 | 890 | 890 | 850 |
| PA 6 regranulates[5] | 2360 | 2130 | 2070 | 2000 | 1970 | 1850 |
| PA 6.6 regrind | 1080 | 970 | 940 | 930 | 910 | 920 |
| PA 6.6 regranulates[5] | 2470 | 2560 | 2560 | 2130 | 2090 | 2040 |
| POM regrind | 850* | 690 | 580 | 610 | 510 | 640 |
| POM regranulates[5] | 2090 | 1800 | 1770 | 1710 | 1650 | 2120 |
| **Average Price** | **(1506)** | **1439** | **1365** | **1270** | **1229** | **1265** |

[5]: equivalent to the grade “regranulates, black”; [6]:preview (may be amended by additional quotes).

## 4 Secondary Plastics Markets

### 4.1 Plastic wastes

The force majeure in the primary goods is also pulling up the secondary markets, in this case standard plastics and technical plastics. And the price rises are affecting both plastic wastes and recyclates. The price rises restore the price difference between virgin grades and recyclates, which had temporarily disappeared.

Plastics recyclers are increasingly demanding good grades of plastic wastes to expand existing recyclate production. Unfortunately, plastic recycling is limited by the fact that insufficient processing input is available. There is a shortage of plastic wastes of sufficient quality and adequate amounts. And, unfortunately, this shortage cannot be made up by imports from other European countries because the import restrictions that have been set up prevent this.

The EUWID price index for waste plastics from April 2021 clearly shows that all commodities are quoted much higher. Bale goods - for production waste and PE post user wastes - rose by an average 44 €/t. For PE production waste, in April LDPE film coloured was quoted at an average 30 €/t higher and LDPE film natural at 65 €/t higher. For PP production waste, PP film coloured and was quoted 25 €/t and PP film natural 65 €/t higher.

In April 2021, the EUWID price index for waste plastics identified mean price rises of 25 €/t to 70 €/t for PE post user films. The relevant EUWID quotes: LDPE shrink hoods natural 435

€/t, LDPE shrink hoods mixed colours 175 €/t, thin film transparent natural 320 €/t, thin film transparent coloured 100 €/t, LDPE agricultural film -18 €/t, commercial mixed film (90/10) 180 €/t and commercial mixed film (80/20) 145 €/t.

## 4.2 Recyclates

Demand for good plastic recyclates, i.e. regrinds and regranulates, continues to be high. Plastics processors want to compensate for the European and worldwide production shut-downs in new grades of plastic with the increased use of recyclates. The recyclers can hardly meet the strong demand for recyclates - resulting in allocation.

Regrinds: the regrinds from PE production waste cost an average 52 €/t more and 77 €/t more for PP, see EUWID price index for waste plastic. Both regrinds from PE post user, i.e. crates sorted according to colour 570 €/t and crates mixed colours 465 €/t, are quoted an average of 70 €/t higher. PS production wastes are quoted an average 49 €/t higher. PVC production wastes are enjoying price rises of 81 €/t and PVC window frames of 87 €/t.

Regranulates: The regranulates are caught up in the price recovery of the virgin grades. Average price increases of 30 €/t to 85 €/t are quoted for regranulates. The plastics recyclers are reacting to the rising prices for plastic wastes with price increases for recyclates. Regranulates will probably continue to become more expensive in the months ahead.

## 4.3 PET Recycling

There are clear shifts in volume for packaging plastics, away from PE, PP and PS towards PET. And where PET is concerned, the particular demand is for packagings comprising a high level of r-PET. As a consequence, this trend is constantly growing – and the excessively high demand for r-PET can no longer be satisfied. This trend is also disadvantageous because PET recycling is mainly based on the recovery of PET beverage bottles. Other PET products are returned for PET recycling only to a limited extent.

The shortage of virgin grade is having a marked impact on the PET secondary markets. And this concerns both the prices for used beverage bottles and recyclate prices (regrinds and regranulates). Due to the existing and disadvantageous import restrictions, recyclers can barely import PET volumes from OECD or non-OECD states. The PET recyclers are therefore expecting a continuing tense market situation.

So far, the bottle volumes in April and May are on the low side due to the weather. Better spring weather is only slowly becoming established, resulting in stronger demand for soft drinks, filled in PET beverage bottles. The fact that the existing coronavirus restrictions are gradually being removed is also positive for the volumes of beverage bottles.

The prices for used PET single-use bottles changed in April as follows: PET transparent +30 €/t, PET mixed +40 €/t, and PET coloured +20 €/t. The high prices for virgin grade (+175 €/t) are also pushing up the prices for recyclates. On average, PET flakes are rising by 85 €/t and PET regranulates by 70 €/t. Demand for PET regrinds and PET regranulates continues to be strong.

# 5 Explanation on the price quotes

A detailed discussion with information of price indices for virgin grades and waste plastics as well as precursor products can be found in EUWID Recycling and Disposal see www.euwid.de, or in EUWID Plastics www.euwid-kunststoff.de. EUWID: No guarantee for any of the prices; prices ex station. As a rule, the prices quoted refer to quantities in excess of 20 tons.

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The quotes for secondary prices, which are updated on an hourly basis, can be calculated using the price lists that are derived from the quotations published in the raw material exchange plasticker, see www.plasticker.de. The prices listed in this index are quoted without reservation - as the majority of the quotes submitted are not necessarily equivalent to the sales prices. Plasticker offers the quality grades regrind and regranulates both as virgin materials and as secondary goods. The term 'bale goods' refers to waste plastics only. Furthermore, plasticker does not distinguish between the following grades: transparent, mixed colours or colour-separated. Therefore, the information provided by plasticker may indicate different market behaviour than the prices quoted by EUWID

Bonn, Thursday, 27. May 2021
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